

## Abstract

A bow resistant semiconductor package includes a  
5 semiconductor die, a leadframe and a plastic body. The  
plastic body includes a molded inner member encapsulating the  
die, and a molded outer member encapsulating the molded inner  
member. The inner member rigidifies the package, and is  
dimensioned such that the outer member has substantially  
10 equal volumes of molding compound on either side of the  
leadframe. The equal volumes of molding compound reduce  
thermo-mechanical stresses generated during cooling of the  
molding compound, and reduce package bow. With reduced  
package bow, a planarity of the terminal leads on the package  
15 is maintained. Also, stresses on bonded connections between  
the terminal leads and electrodes on a supporting substrate,  
such as a printed circuit board or multi chip module  
substrate are reduced. In an alternate embodiment, the  
package includes volume equalizing members formed on the  
20 leadframe configured to equalize the volumes of molding  
compound on upper and lower segments of the package body.